AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of estimating ~~the~~ a signal-to-noise ratio of a ~~wanted signal, in particular a~~ digital signal[[,]] received by a radiocommunications receiver, ~~characterized in that, to minimize the estimation noise of the signal-to-noise ratio,~~ the method comprising:

estimating separately a wanted signal and ~~the~~ a noise signal of the digital signal; ~~are estimated separately and~~

filtering separately the wanted signal ~~(E_b)~~ and the noise ~~(N_o)~~ signal; and ~~are filtered (36, 44) separately before division (40) of~~

determining the signal-to-noise ratio by dividing the wanted signal which has been filtered by the noise signal which has been filtered,

wherein the filtering of the noise signal comprises determining a noise value which is used to determine the signal-to-noise ratio based on a statistical distribution of noise power measurements for a predetermined period during which a statistically representative number of measurement samples is collected and which is sufficiently short for the noise signal to remain practically stationary.

2. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein the filtering ~~(36)~~ of the wanted signal ~~(E_b)~~ is different from the filtering ~~(44)~~ of the noise signal ~~(N_e)~~.

3. (Canceled)

4. (Currently Amended) A method according to claim [[3]] 1, ~~characterized in that the noise level used has a value (μ_{NO} + Δ_{NO}) such that the~~ wherein the noise value is determined such that a probability ~~(P)~~ that ~~the~~ an instantaneous noise level exceeds that the noise value is less than a predetermined threshold ~~(c)~~ during the ~~observation~~ predetermined period ~~(T)~~.

5. (Currently Amended) A method according to claim [[3]] 1, ~~characterized in that~~ wherein the noise value used to determine the signal-to-noise ratio is ~~the~~ a maximum value of the measurement samples over the ~~particular~~ predetermined period ~~(T)~~.

6. (Currently Amended) A method according to claim [[3]] 1, ~~characterized in that the~~ wherein moments of the distribution are determined.

7. (Currently Amended) A method according to claim 6, ~~characterized in that the~~ wherein an average ~~(μ)~~ μ and ~~the~~ a variance ~~(σ^2)~~ σ^2 of the distribution are determined in that the

noise value used is $\mu + n\sigma$, where σ is a standard deviation and n is a number determined according to the predetermined threshold.

8. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein a finite or infinite impulse response low-pass filter is used to filter the noise signal.

9. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein a finite impulse response filter is used to filter the wanted signal (E_b).

10. (Currently Amended) A method according to claim 9, ~~characterized in that~~ wherein the finite impulse response filter is an averaging filter.

11. (Currently Amended) A method according to claim 9, ~~characterized in that the~~ wherein a transmitter provides a reference signal with a regular period at a particular level and the reference signal is utilized as the wanted signal to estimate the signal-to-noise ratio ~~is estimated from that reference signal~~.

12. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein an infinite impulse response filter is used to filter the estimate of the wanted signal.

13. (Currently Amended) A method according to claim 12, ~~characterized in that~~ wherein a first order auto-regressive filter is used, for example, as expressed by the equation:

$$\hat{x}_i = (1 - a)\,\tilde{x}_i + a\,\hat{x}_{i-1}$$

where $\tilde{x}_i$ represents the instantaneous estimate of the wanted signal at time i, $\hat{x}_i$ represents the smoothed estimate of the wanted signal at time i and a is an integration coefficient.

14. (Currently Amended) A method according to claim 12 , ~~characterized in that~~ wherein packets or cells are received sporadically and each packet or cell received is filtered.

15. (Currently Amended) ~~An application of the~~ A method according to claim 1, further comprising ~~to estimating~~ the signal-to-noise ratio ~~in a telecommunications receiver sending data for~~ controlling ~~the~~ a transmit power of a corresponding transmitter based on the signal-to-noise ratio.